



Millennium Challenge Corporation

Reducing Poverty Through Growth

GUIDELINES FOR ECONOMIC ANALYSIS

Objectives

With one of MCC's principal defining characteristics being a focus on measuring results and investing for performance, all proposal components should be subjected to as careful an economic analysis as is feasible in the country circumstances, preferably starting at as early a point as possible in the proposal assessment process. MCC's goals include seeking as high an economic return on its investments in eligible countries as is possible while achieving poverty reduction and without voiding the country ownership principle. We need economic reasoning and analysis, starting early on and refined continually throughout the due diligence process, to assess a project's logic and potential impact on economic growth and poverty reduction, to test claims of the necessity and sufficiency of project components in achieving the overall objective, and to examine critical linkages and dependencies. Economic analysis is one of the tools we will use for screening and agreeing to components of proposals, investigating alternatives, comparing with evidence from the experience of MCC and others, and seeking to maximize results.

Early Evaluation

Upon receiving a proposal, or substantive communication on what is likely to be in one, MCC should subject it to preliminary economic analysis – at least of a “back-of-the-envelope” nature – ideally along with an initial examination of its technical feasibility and institutional capacity. To maintain our focus on MCC's mission of promoting poverty reduction through economic growth and to deploy our resources most efficiently, we should require quantitative estimates, however rough, of economic and distributional impact (e.g., the poverty reduction impact) of proposal components early enough so that the economic outcomes can be considered at the same time, and with at least the same weight, as any of the various other measures that need to be considered for a proposal to be deemed all or part of a “good compact.” Such economic analyses would include characterizing the nature, magnitude, and timing of the proposal's economic effects on key groups, assessing the aggregate impact of these effects and identifying the key factors affecting the likelihood, magnitude, and direction of the effects.¹ Finally, in order to assist due diligence, economic analysis should clarify the causality underlying the proposal, and identify critical issues that need to be tested and given priority in the due diligence process.

Clearly, economic analyses will require iterative refinement as more and better information becomes available. The key point here, however, is that we are more likely to conclude high-

¹ While the balance of the evidence suggests that, on average, economic growth will not significantly affect a country's income distribution, outcomes may differ from case to case. Thus, an ex ante assessment of a proposal's expected distributional effects is a natural complement to estimates of economic growth impacts.

quality compacts quickly if we encourage countries to look at economic outcomes from the outset, and if we begin working with countries on these analyses early on, before the development of the opportunity memo. In many cases it will be appropriate to send an early, pre-opportunity memo mission comprising staff or consultants relevant to the concept paper or proposal and adequately representing Country Relations, Monitoring and Evaluation (M&E) and Markets and Sector Assessments (MSA) as soon as possible after it surfaces. As much information as can be gathered quickly from sources in Washington, of course, should be reviewed prior to traveling, and in some cases it may be possible for MSA to have a reasonable comfort level on technical feasibility, or for M&E to have a view on economic impact, without having to join the exploratory mission.

It may seem obvious, but it probably bears saying that our economic analysis has to start early in the process, to help the host country identify the key issues, data gaps, etc. and then iteratively be refined in conjunction with the host country as the proposal is refined, rather than calculated toward the end of the process after the program has been developed.

Economic Rate of Return (“ERR”)

We will be seeking to calculate a real ERR for each of the major compact components, and as far as possible for the compact taken as a whole. We will not in most cases be making investments large enough relative to the total economy to expect to identify a measurable impact at very high levels of aggregation. It does not make sense for us to spend scarce time and resources on large, time-consuming models. As much information as can reasonably be gathered at each stage of the proposal assessment process should be gathered on costs and benefits of proposal components, including both quantifiable and qualitative economic impacts. We should be seeking to quantify as many as possible of the meaningful effects on all identifiable, significantly affected parties. (The appropriate parties will include some (but in most cases not all) of the following: government entities, employees, customers, suppliers, competitors, new entrants, producers of complementary products, local populations, neighbors, and the rest of society.) This should be a natural part of working with eligible countries in order for them to find and take ownership of opportunities with as high priority and returns as are available, as contrasted with only focusing on components whose preparation is most advanced.

A judgment will need to be made on reasonableness (in terms of time, cost and accuracy) for how much and what kinds of data to collect and how much to seek to quantify. It may be possible over time to develop data standards so as to be more consistent across countries and teams. Doing some sensitivity analysis for major variables will in many cases at least reduce the need for extensive and time-consuming refinement of data and estimates. Over time, and with further analysis of available evidence from the experience of others, we may be able to identify certain sectors or types of projects whose benefits are so evident and non-controversial that we will not need to use scarce resources to validate them, but we are not at that stage as of today. Even in these areas we should undertake economic analysis as quantitatively as we can, explicitly outlining our assumptions and articulating key sensitivities, while recognizing the increasing costs (and speculativeness) of greater precision. Also, future research may allow us to identify useful summary data, from the experience of MCC and others, for expected and realized ERRs by sector.

In addition to calculating the real ERR from the information reasonably available, we should list and describe highly likely but unquantified and unquantifiable externalities, both positive and negative. For the quantifiable portion of the economic analysis, MCC is going to use an ERR hurdle rate that varies with country circumstances. While it may not be possible in all cases, we will attempt to ensure both that the real ERR exceeds the average of the historical real growth rate for the previous three years², and that there are unquantified externalities that should push the return significantly higher. (We wish to avoid unnecessary investment of scarce resources in developing complex models and teasing out impacts.)

It should be noted that in some cases it will be appropriate, regardless of the ERR, to look at that sub-set of the cost and benefit flows that produces the financial rate of return to ensure sustainability and viability of the proposed project, including tariff policies. In these cases, it is unlikely that a component with a negative financial rate of return would be acceptable, but one that exceeds the historical three-year growth rate average might be if the externalities were positive enough.

Future Work

In addition to possible future development of summary evidence and data standards, there are a number of interesting and difficult technical and practical issues that we do not have answers for at the moment, or only partial ones. The answer to the question of the time period over which we should be looking at ERR calculations right now is “over the natural life of that component”, and unless a project choice is being made between two proposal components with relatively similar ERRs we are not proposing to adjust for different length of benefit streams. The level of confidence we have in the ERR as computed, which will have a good deal to do with how thoroughly prepared the project is, will be directly related to the confidence we have in the program cost estimates and in the assumptions on which the ERR analysis is based. Whether MCC itself, its partner countries, or the two together working in a collaborative effort, will calculate ERRs will vary case by case, but in any case MCC will have to be satisfied with the quality of the analysis. Differences in data availability, reliability and quality and gaps, across countries and between components, will have to be lived with after we have made reasonable efforts to improve what we can get. Whether we get overall compact ERRs by using cost-weighted averages, combining cost and benefit flows of some or all of the components, or using another approach that may be suggested, should be determined by the facts and circumstances of the compact. The degree of elaboration of the model for any component will similarly have to be what judgment says is “good enough.” In general, additional information or methodological refinements are most valuable when these would change project design or execution decisions.

There is also the issue of whether we should be using ERR or net present value (NPV) for the economic analysis input to project selection. There appear to be reasonable arguments for using NPV rather than ERR as a decision making tool. The flows to be discounted would be the same as for the ERR calculation. The difficulty is in picking a discount rate, for which we have no

² This intra-country hurdle rate will be revisited when we have more data and experience from our own projects and from a review of developing country experience more generally.

clear guide. Testing project cost and benefit flows with several discount rates to check time sensitivity of risks and returns is good practice in any case, but such testing does not settle the appropriate rate question. (The same rate selection difficulty, of course, is inherent in selecting a hurdle rate for ERR for project selection, but there is an empirical basis for linking ERR hurdle rates to historical country growth rates.) It could be useful to calculate and show NPVs as well as ERRs, but MCC would not propose to require this in general. When comparing the economic impact of mutually exclusive project alternatives of different sizes, however, ERR and NPV can lead to different choices and NPV might in such limited circumstances be considered.

Responsible MCC Staff

Given their expertise in the area of economic analysis, M&E will take primary responsibility in carrying out, or overseeing, the economic analyses for proposed activities. (MSA, particularly in infrastructure projects, may be heavily involved in producing ERRs, as may Country Relations in specific situations.) In addition, as and to the extent that practical evidence becomes available, M&E will seek to identify useful and relevant comparisons of activities within proposed programs and possibly even across programs, based on economic analyses.